

AMENDMENTS TO THE CLAIMS

1-4. (Canceled)

5. (Currently Amended) A method for checking the existence of an optical disk in a disk drive using a focus error signal, comprising the steps of:

- (a) receiving a focus error signal;
- (b) sampling the received focus error signal at constant intervals;
- (c) summing the values of the sampled focus error signal, which are less than a first predetermined reference level;
- (d) determining whether the summed value is greater than a predetermined judging level; and
- (e) judging the existence of ~~an~~ the optical disk in the disk drive based on the result in the determining step (d).

6. (Previously Presented) The method set forth in claim 5, wherein the step (b) is started when the value of the focus error signal exceeds the first predetermined reference level, while moving an optical pickup.

7. (Previously Presented) The method set forth in claim 6, wherein the predetermined reference level includes first and second predetermined reference levels, where the first predetermined reference level is for starting said ~~detecting~~ sampling step (b) and the second predetermined reference level is for sampling the focus error signal.

8. (Previously Presented) The method set forth in claim 5, wherein in said judging step ~~(e)~~ (e), an optical disk is judged to exist if the summed value of the focus error signal is greater than the predetermined judging level.

9-11. (Canceled)

12. (Previously Presented) The method set forth in claim 7, wherein the first predetermined reference level is higher than the second predetermined reference level.

13. (Canceled)

14. (Previously Presented) The method set forth in claim 5, wherein said step (b) is performed if a focus OK signal is asserted.

15. (Previously Presented) The method set forth in claim 14, wherein the focus OK signal is asserted based on a result of comparing a beam strength signal and a reference signal.

16-18. (Canceled)

19. (Previously Presented) The method set forth in claim 5, wherein a focus error value is added to the summed value if the error value is greater than the predetermined reference level.

20. (Currently Amended) An apparatus for checking the existence of an optical disk in a disc drive using a focus error signal, comprising:

an optical pickup for outputting the focus error signal;

an analog-to-digital converter for sampling the focus error signal at constant intervals;

a microcomputer for determining the existence of the optical disk in the disk drive by summing the values of the sampled focus error signal, which are less than a first predetermined reference level, and determining whether the summed value is greater than a predetermined judging level.

21. (Previously Presented) The apparatus set forth in claim 20, wherein

the optical disk is judged to exist if the summed value of the focus error signal is greater than the predetermined judging level.

22. (Currently Amended) The apparatus set forth in claim 20, wherein ~~the analog-to-digital converting starts to sample~~ sampling of the focus error signal by the analog-to-digital converter is performed if a focus OK signal is asserted.

23. (Previously Presented) The apparatus set forth in claim 22, wherein the focus OK signal is asserted based on a result of comparing a beam strength signal and a reference signal.

24. (Previously Presented) The method set forth in claim 20, wherein a focus error value is added to the summed value if the error value is greater than the predetermined reference level.